UNITED
NATIONS

TD

United Nations Conference
on Trade and Development

Distr.
GENERAL

TD/B/COM.1/27
16 July 1999

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Commission on Trade in Goods and Services,
and Commodities
Fourth session
Geneva, 20 September 1999
Item 3 of the provisional agenda

THE WORLD COMMODITY ECONOMY: RECENT EVOLUTION, FINANCIAL CRISES, AND CHANGING MARKET STRUCTURES

Report by the UNCTAD secretariat

Executive summary

The importance of commodities in world trade is declining and developing countries are losing their share in world commodity trade, particularly in dynamic, high-value agricultural products and processed items. Massive agricultural support in developed countries has been an important factor in this respect. The loss in shares is especially marked for African, least developed and ACP countries. The historically extremely low prices for commodities aggravate the negative impact of these losses on the economies of commodity-dependent countries. Increasing yields have not counterbalanced these impacts for agricultural products. Moreover, the margins between international prices for commodities and consumer prices are widening. In metals and minerals, cost reductions have been substantial.

Recent financial crises have reduced the demand for commodities in South-East Asia. At the same time, supplies of several commodities from the region have increased. There has been a significant depressing impact on the commodity markets, somewhat mitigated by strong demand in developed countries. More recently, economic problems in Brazil generated downward pressure on prices. In all crisis-stricken countries, however, following currency depreciations, the commodity sector has performed considerably better than other parts of the economy. These devaluations have been a principal vector of contagion.

The concentration on the demand side of world commodity markets is continuing, while state participation in developing countries' agricultural sectors is radically reduced. Mainly as a result of the latter, the domestic provision of some crucial services has been hampered and purchasing firms with large financial resources have been able to penetrate deep into the marketing and production structures in developing countries. Although this opens up opportunities for export-oriented enterprises in developing countries, it also generates important new challenges for them.

Policy proposals include the elimination of agricultural support and protectionism in developed countries, measures to make the international markets more competitive, filling the void in developing countries created by the withdrawal of the State from the commodity sector, improved skills in the enterprise sector of these countries, and renewed producer consumer dialogue which involves all stakeholders.

GE.99-52436

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I. INTRODUCTION

1. The longstanding problems faced by the world commodity economy have been analysed by UNCTAD and others many times in the past and discussed at length in various intergovernmental forums, including UNCTAD. These problems persist and have in fact become more serious over time. The long-term declining terms of trade, price instability, and institutional factors emanating from economic policies, such as agricultural subsidies and trade barriers, have been exacerbated by the effects of financial crises. Significant changes in the distribution and market structures are also becoming increasingly important in determining the success or failure of the commodity sector as an engine of development, particularly in commodity-dependent developing countries.

2. In this report, in view of the page limitation, rather than making an exhaustive but superficial review of the factors behind the commodity situation, an attempt has been made to identify and analyse in some depth some of the principal issues currently affecting commodity-exporting developing countries. In Chapter II, an overview of the evolution of world commodity trade since the 1970s emphasizes the loss of market shares by developing countries, in particular African and least developed countries (LDCs). The impact of agricultural support policies in developed countries is also underlined. In Chapter III, information is provided on the declining trend and current collapse of commodity prices, and in this context reference is made to increasing productivity in both agriculture and metals and minerals. In Chapter IV, in order to understand better the current commodity situation, the implications of recent crises on both the supply and demand sides are briefly analysed, focusing particularly on the impact of devaluations and the links between financial and commodity markets. Chapter V reviews the changes in distribution and market structures, emphasizing the twin trends of concentration in global markets and liberalization in producing countries, and examines the impact of these trends on commodity exporting-countries. Some policy proposals are offered in the final chapter.

II. THE EVOLUTION OF THE WORLD COMMODITY ECONOMY

A. Global commodity trade and consumption

3. Over the last three decades the share of non-fuel commodities in world trade has been declining. It dropped from 25.5 per cent in 1970-1972 to 18.1 per cent in 1980-1982, the steepness of the drop reflecting the sharp rise in the relative price of petroleum. Since the early 1980s, it dropped further, reaching 14.1 per cent in 1996-1997. Between 1980 and 1995, world trade in agricultural products grew, in value terms, at 4.7 per cent per year, and world trade in mineral commodities at 4 per cent, both considerably slower than the growth in trade of manufactured products, which was 8.6 per cent.

4. The decline in relative prices of commodities and a "double counting" of manufactures trade have both contributed to the difference in growth rates of trade between commodities and manufactures. As manufacturing has become more international over the years, and different stages of processing increasingly take place in different countries, the "double counting" of manufactures trade has increased, reducing misleadingly the relative importance of commodities[1]. Moreover, an

[1] For instance, exported cars are often assembled from imported parts. Some of these parts may, in turn, have been assembled from imported pieces. The shares of cars, motor vehicle parts and internal combustion engines in international trade are, respectively, 5 per cent, 2.5 per cent, and 1 per cent. Simply adding these up exaggerates the relative importance of car related items, and consequently reduces that of other products such as commodities for which such double counting is much

important characteristic of the commodity sector is the relatively high proportion of value added which is created domestically in this sector, compared with other economic activities that are much more dependent on imported inputs. Thus the contribution to the economy of a dollar earned through commodity exports, particularly in processed forms, is likely to be higher than that earned through manufactured exports using imported inputs. These factors, together with the strong dependence of a large number of developing countries on this sector for the generation of foreign exchange and savings necessary for development, render the importance of commodity trade to development higher than is apparent in world trade figures.

5. Developments differ significantly between commodity subsectors, with some showing a more positive consumption growth and trade performance than others. In this connection, the impact of changes in the composition of demand is particularly evident for food commodities. In developed countries, the consumption and trade of high-value products such as fresh fruit and vegetables, many kinds of processed foods, in particular "convenience foods", and certain niche items, such as organically grown products, is rapidly increasing. For example, the proliferation of chocolate containing snacks has been a crucial factor behind the relatively fast growth of demand for cocoa. In developing countries as well, as incomes grow, the pattern of food consumption changes, increasing the demand for a different group of "high-value" products such as vegetable oils and meat, for which demand in the industrialized countries is stagnating. In the past 25 years, for all developing countries combined, per capita consumption of meat, eggs and milk has risen by about 50 per cent per person. It remains, however, still at about one quarter of the developed world average[2], indicating the consumption potential that exists, not only for meat but also for all sorts of commodity-based feedstuffs, such as grains and oil cakes. Considering raw materials, competition from synthetics and composite materials is a restraining factor for growth in demand, although some commodities have favourable natural qualities that give them a competitive edge over substitutes.

6. Demand for minerals and metals is determined by the raw material needs of industrial production and construction activities. However, the relationship is not entirely stable and is affected by the product composition of output as well as by changes in technology and the prices of other inputs to the production process. Thus, as a result of the increases in energy prices in the 1970s the mineral intensity of manufacturing declined significantly in the 1970s and 1980s. In contrast, during the 1990s, commodity intensity of GDP for major metals has been roughly constant according to most estimates[3]. This means that global demand for metals has grown at a rate about equal to that of world GDP. The rate of recycling, however, has increased during the same period, and consequently, the demand for primary metals has grown at a slightly lower rate[4].

B. Developing countries in world commodity production and trade

7. During the 1970s and 1980s the shares of developing countries in world exports of commodities declined. Based on three-year averages, their (excluding China and the former Soviet Union) share, which was 31.5 per cent in 1970-1972, fell to 25.4 per cent in 1990-1992, to rebound

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less significant.

[2] IFPRI, "Are we ready for a meat revolution?", *News & Views*, March 1999, p. 6.

[3] See Crowson, P. *Inside Mining*, Journal Books, London 1998, for a longer perspective on intensity of use for metals.

[4] The increase in the rate of recycling has been most striking for lead, where the proportion of refined production coming from scrap increased from 30 per cent in 1976 to 48 per cent in 1997, and for aluminium, where the proportion of recycled material in production rose from under 18 per cent to 25 per cent over the same period (World Bureau of Metal Statistics, *World Metal Statistics*, various issues).

somewhat in the 1990s to 27.4 per cent (statistical annex, Table 1). The pattern was similar both for agricultural products and for metals and minerals. For some groups of countries, such as Africa as a whole, Sub-saharan Africa; African, Pacific and Caribbean (ACP) countries; and LDCs, however, there was no rebound and the decline was particularly sharp. For example, LDCs' share in world commodity exports declined from 4.7 per cent in 1970-1972 to 1.2 per cent in 1996-1997. If the same shares were maintained as in 1970-1972 (and abstracting from any impact this might have had on prices), Africa's average annual export earnings in the period 1996-997 would have been $41.5 billion higher than what it was. For the LDCs, the difference would have been $26 billion.

8. In the same period, developing countries' share in world imports of food items declined marginally, but their shares, particularly of Asian developing countries, in imports of agricultural raw materials, metals and minerals, and fuels increased sharply. Only Latin America and Sub-saharan Africa still have significant surpluses on their non-fuel commodity trade balance. Several developing countries, particularly in Africa, continue to be highly dependent on food imports and their dependence has even increased.

1. Agriculture

9. In agriculture, production grew faster in developing than developed countries[5]. Much of the increased production in the former was domestically consumed, however, while that in the latter was mostly directed to export markets. This is one of the principal factors behind the decline in developing countries' share in world agricultural exports from 31.7 per cent in 1970-1972 to 25.4 per cent in 1990-1992. By 1996-1997, it had increased again to 30.7 per cent, a figure, nevertheless, smaller than 25 years earlier (statistical annex, Table 2).

10. There is a significant divergence in the experiences of different regions. The share of Africa in world exports declined dramatically for food items as well as agricultural raw materials, while Asia increased its share for food items, and developing America, for agricultural raw materials. For items for which the shares of developing countries have increased significantly, this can often be attributed to a large surge in the exports of a few countries where an important push has been undertaken. Examples include exports of poultry by Brazil, vegetable oils by Malaysia and Indonesia, and rice by Viet Nam.

11. Developed countries gained much ground as a result of massive subsidies provided to their producers and exporters, and also captured the bulk of the rapidly growing trade in processed products. Recently, it is in this latter area that growth has been particularly impressive. Between 1980 and 1996, the annual growth of exports by Organisation for Economic Cooperation and Development (OECD) countries of primary agricultural commodities and processed agricultural products was, respectively, 2.5 per cent and 6.5 per cent[6]. The latter group of high value-added items includes products requiring significant blending, processing and marketing activities, in particular marketing under brand names[7]. These are the products with more dynamic markets in recent years. Regarding

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[5] World Bank, *World Development Report*, various editions.

[6] OECD, *Agricultural Policies in OECD Countries, Monitoring and Evaluation, 1999*, Paris, 1999, p. 34.

[7] It is not only in processed products that most of the value added is created at the latter stages of the product chain. Studies on the distribution of revenues in the market chain for fresh products indicate that most of the value added until the product reaches the consumer is created after the product leaves the farm, in particular at the wholesale or retail stages. For example, in 1994, "US shoppers spent an average of $3.99 per pound on snow peas, and producers in Guatemala received about 18

tropical beverages, for example, developing countries' share in world exports (of raw and processed forms) declined from close to 85 per cent in the early 1970s to about 55 per cent in the early 1990s. Over the past 15 years, Germany's share in world coffee exports has risen from about 1 per cent to about 5 per cent, and in tea exports its share, which was less than one half per cent, has increased five times. A similar development can be observed for spices. The share of the European Union (EU) which used to be around 10 per cent in the early 1980s has now surpassed 15 per cent.

12. A brief review of the cocoa sector illustrates this situation. The share of cocoa-producing countries in world exports declines as the stage of processing increases. In 1997-1998, for cocoa beans, cocoa liquor, cocoa butter, cocoa powder and chocolate, the shares of these countries were, respectively, 90 per cent, 44 per cent, 38 per cent, 29 per cent and 4 per cent (statistical annex, Table 3). Moreover, over a 15-year period, the shares of these countries in world exports at all stages of processing have declined. Regarding the most lucrative stage of the cocoa product chain, namely, chocolate, in the 1990s, developed countries have increased the quantity of their exports much faster than that of imports (statistical annex, Table 4). There has, however, been a recent increase in the share of developing countries in world chocolate exports, accounted for by a recovery of exports from Côte d'Ivoire and Mexico and by relatively new entrants into the market, such as Indonesia and the Philippines. Nevertheless, his has merely brought the developing countries' share back to the meagre 4 per cent of the world market which they held in the mid-1980s.

13. Liberalization of agriculture pursuant to the Uruguay Round could be expected to reinforce the recent increase in the shares of developing countries in world agricultural exports. Despite the fact that four years have elapsed since the conclusion of the Uruguay Round, however, agricultural support measures in developed countries, which have been instrumental in their increased shares in agricultural exports and had detrimental impacts on developing countries, have not declined. "Uruguay Round disciplines were not a constraint for most OECD countries ... since ... the current Total Aggregate Measure of Support was well below Uruguay Round commitment levels"[8]. It is also very likely that these subsidies have contributed to the slowness of producers' response to price falls in recent crises.

14. In 1998, in the 24 original OECD countries (i.e. excluding Czech Republic, Hungary, Republic of Korea, Mexico and Poland), total agricultural support[9] amounted to about $335 billion, producer support to $251 billion (statistical annex, Table 5). This makes total agricultural support more than three times the official development assistance (ODA) flows and more than twice the foreign direct investment (FDI) flows to developing countries in 1998, and almost 60 per cent of total world agricultural trade in 1997. About 52 per cent of the producer support in the OECD is given by the EU (up from 45 per cent in 1986-1988). On average, farmers in Switzerland received about $33,000 of producer support in 1998. Farmers in the EU, Japan and the United States received around $20,000 as an average. Support provided to some products which are also exported by developing countries is many times the value of world trade in these items. For example, in 1997, in

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cents per pound, for mangoes, the US consumer spent 99 cents per pound, and the producer received about 8 cents". Thrupp, L. A. *Bittersweet Harvests for Global Supermarkets: Challenges to Latin America's Agricultural Export Boom*, World Resources Institute, Washington, 1995, pp. 77-81.

[8] OECD, *op. cit.*, pp. 43-44.

[9] Total support is "the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures which support agriculture, net of associated budgetary receipts", and producer support is "the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at farmgate level, arising from policy measures regardless of their nature, objectives or impacts on farm production and income". OECD, *ibid.*, p. 271.

the 24 OECD countries, producer support to rice and meat was, respectively, 4.11 and 6.18 times the value of world exports of these products.

15. Another support measure which acts as a constraint on expansion of exports by developing countries is the minimum import prices used by the EU for the fruit and vegetable sector. Apples, mandarins, lemons, tomatoes, cucumbers and courgettes are subject to such arrangements all year, and various other products of export interest to developing and other countries for specified periods. "Although these ... have not been challenged within the WTO, ... it is difficult to believe that they will escape unchallenged in the Millennium Round."[10]

Box 1

Subsidized exports and West African tomatoes

After the United States and before Turkey, the world's second largest producer of tomato concentrate is the EU. Its tomato farmers are paid a minimum price higher than the world market price, which stimulates production. The processors, in turn, are paid a subsidy to cover the difference between domestic and world prices. In 1997, this subsidy is reported to have reached about $300 million. The processors, then, need to find markets, and about 20 per cent of exports go to West Africa. In recent years, about 80 per cent of regional demand in this region has been covered by tomato products from the EU, which are cheaper than local supplies. Stiff competition from EU industries has led to the closure of tomato processing plants in several West African countries.

In Senegal, for instance, tomato cultivation was introduced in the 1970s, and progressively acquired an important position for farmers, for whom tomato production was synonymous with a key opportunity to diversify their farming systems and stabilize incomes. In 1990-1991, production of tomato concentrate was 73,000 tons, and Senegal exported concentrate to its neighbours. Over the past seven years, total production fell to less than 20,000 tons. One of the main reasons for this dramatic fall was the liberalization of tomato concentrate imports in 1994. Despite the positive impetus provided by the devaluation of the CFA franc, the tomato processing industry could not compete with EU exporters. From 1995 on, exports to Senegal grew considerably, as shown by the following table.

	1993	1994	1995	1996	1997
Tons	381	62	5130	5348	3795
Million US$	0.3	0.1	4.8	3.8	3.0

SOCAS, the one Senegalese processing firm that has survived, buys imported triple concentrate and processes it into double concentrate. Other West African countries such as Burkina Faso, Mali and Ghana have had similar experiences of enormous increases in imports of EU tomato concentrates. Gambia, small as it is, imports even more tomato concentrate than Senegal, and consumption of concentrate is increasingly replacing that of fresh tomatoes. Ghana, which used to have three tomato processing plants in the early 1980s, has now become Africa's largest importer of EU tomato concentrate.

The lack of credit, and low prices, have contributed to the stagnation of West African tomato processing industries. If there is to be any hope of competitiveness, factories in the region will need new machines and massive investments. Foreign investment could be one option, but these factories would not interest potential foreign investors as long as the European products take over the local markets.

Source: Eurostep Dossier on CAP and Coherence, Euorostat.

2. Minerals, ores and metals

16. Regarding ores and minerals, the rebound in world export shares of developing countries during the 1990s can be attributed to a rapid increase in developing countries' (except Africa's) share of world production in the 1990s, mainly as a result of an expansion of foreign investment,

[10] Swinbank, A., K. Jordan and N. Beard, "Implications for Developing Countries of Likely Reforms of the Common Agricultural Policy of the European Union", report prepared for the Economic Affairs Division of the Commonwealth Secretariat, January 1999.

particularly in Latin America. From 1990 to 1995, the share of developing countries in the value of total non-fuel mineral production at the mining stage increased from 46.6 per cent to 55.2 per cent. The increase was particularly rapid for metals, including gold. The increase can be expected to continue, since exploration, which is a good indicator of future mineral investment and production, has shifted geographically from developed to developing countries. While in 1991, three developed countries (Australia, Canada and the United States) accounted for 61 per cent of exploration spending by large mining companies and Africa, Latin America and developing countries in the South-east Asia/Pacific region for 35 per cent, by 1998 the proportions had changed to 37 per cent and 56 per cent, respectively[11]. Developing countries have also been able to increase their share of world production of refined metals, which has grown steadily for several decades and is approaching their share for unprocessed minerals[12]. The increase in the production share of developing countries for minerals and metals illustrates how these countries have been able to use their comparative advantage, unlike agriculture where subsidies and other support policies generate monumental distortions that limit developing countries' ability to enter many markets. Due to increased processing in developing countries, both of ores to metals and of metals into semi-fabricated products, the share of these countries in world exports of unprocessed forms has increased less than that in production.

III. COMMODITY PRICES

17. Commodity prices have two characteristics that set them apart from the prices of manufactured goods: they decline over time in real terms and they fluctuate significantly. This Chapter focuses on the decline over time. Recent price fluctuations will be examined in Chapter IV, in the context of the implications of financial crises on commodity markets. Suffice it to say at this stage that the reasons for fluctuations in general include cyclical or sudden variations in supply and demand, expectations, macroeconomic conditions, weather and, increasingly, conditions in financial markets[13]. Price movements for many commodities also show a clear correlation with stock levels. As the ratio of stocks to utilization increases, prices fall[14]. Over the past few years, and particularly in the case of the latest crisis, it appears that supply-side rigidities caused by agricultural support policies and technological changes in the metals and minerals sector have also played an important role in exacerbating the magnitude of the price falls.

A. Current price situation

18. There is general agreement that, in real terms, prices of commodities are falling in the long term. For example, one of the longest series, *The Economist*'s industrial commodity-price index, fell in 1999 to its lowest level in real terms (adjusted by the United States GDP deflator) since the start of the series in 1845.

19. Developments over the past three decades show that this long-term trend has continued and

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[11] Annual press releases by Metals Economics Group, Halifax, Canada.

[12] From 1975 to 1998, developing countries' share of world production of aluminum increased from 9.7 per cent to 31.9 per cent, that of copper, from 23.8 per cent to 41.1 per cent, that of lead, from 15.4 per cent to 30.2 per cent, that of nickel, from 19.4 per cent to 24.7 per cent, and that of zinc, from 14.7 per cent to 38 per cent (World Bureau of Metal Statistics, *World Metals Statistics*, various issues).

[13] In addition, commodity prices would be expected to fluctuate more than manufactured prices because the markets for the latter are less competitive and prices are stickier in such markets. Moreover, instability would be higher under the flexible exchange rates which are increasingly adopted by developing commodity-exporting countries. (Liang, IMF WP, 98/163).

[14] This has significant implications for commodity policy that aims to reduce fluctuations, and calls for supply management measures which are often inherently difficult to pursue.

become more pronounced (statistical annex, Table 6). The decline since 1970 is slightly over 40 per cent when the combined commodity price index is deflated by the price index of manufactured exports of developed countries. The 1998 average prices were substantially lower than the 1979-1981 averages, not only in real terms, but also in current dollars, and this is the case for practically all product groups[15]. The price index, in current dollars, for non-fuel commodities remains at its lowest level since 1993 (when the lowest prices were experienced for many products after 1987)[16]. The temporary increases observed in January 1999 in the prices of a few commodities have been, as is very often the case, the result of "fortuitous"events on the supply side rather than of changes in market fundamentals.

B. Price situation in the light of increased productivity

20. Over the long term, price trends are influenced by fundamental changes in supply and demand conditions. Demand and supply growth have been briefly analysed in Chapter II. This section focuses on whether improvements in productivity and yields compensated for falling prices.

21. The utilization of improved seeds and chemical inputs, mechanization, and better farming practices have increased yields in agriculture substantially. Thus, the question as to arises whether producers have been able to make up for declining prices by increased yields. According to data from the Food and Agriculture Organization (FAO), between 1979-1981 and 1995-1997, yields per hectare increased by around 30 per cent for most products (an exception is coffee, for which there is no increasing trend). Although regional differences exist, they do not appear to be systematic. When price declines are taken into account, however (except for rice, tea and cotton, whose prices in 1979-1981 were particularly low), it emerges that prices declined much more than yields increased, and potential increases in earnings due to improved yields have been more than offset[17]. When prices are expressed in real terms by deflating them with export unit values of manufactured goods exported by industrialized countries, the losses are even greater (statistical annex, Table 7). Those producers whose yields increased less than the average are naturally faced with a much worse situation.

22. In the metals and minerals sector, cost reductions and productivity increases appear to take place in spurts and to be triggered mainly by crises, whether structural or cyclical. In such circumstances, high-cost labour intensive capacity is shut down[18]. Restructuring of this type took place during the 1980s and early 1990s, mainly in response to overcapacity. Labour productivity in metal mining in Canada increased at an annual rate of 12 per cent during the period 1986 to 1996, while that in nonferrous metal smelting increased at an even higher rate of 13 per cent per year. In the United States, labour productivity in nonferrous metal smelting increased at an annual rate of slightly over 6 per cent during the same period[19]. Given the technological homogeneity of the mining and metals industry and the weight of these two countries in world production, the figures are likely

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[15] For the special situation of vegetable oilseeds and oils whose price index is almost level with the base year, see the discussion on the Asian crisis, below.

[16] Prior to the recent surge following OPEC's action, and except a brief period in 1988, the price of petroleum had never been as low as they were in 1998 since 1976.

[17] Yields are only one element of profitability, as the costs of inputs that may have been the cause of increased yields, or wages, rise, the losses due to price declines augment.

[18] Tilton, John, *Labour Productivity, Costs, and Mine Survival During a Recession*, paper presented at the Eighth Annual Meeting of the Mineral Economics and Management Society, Ottawa, 15-17 April 1999.

[19] Natural Resources and Energy Canada, *From Mineral Resources to Manufactured Products: Toward a Value-Added Mineral and Metal Strategy for Canada*, 1998, p. 13.

to be broadly representative of productivity gains made in the industry as a whole, particularly since the early globalization of minerals and metals markets has exerted a strong equalizing pressure on costs across countries.

C. Falling international prices and consumers

23. The sharp and persistent declines in world prices have not been reflected in the prices paid by consumers. One of the reasons is the small part that is accounted for by commodities in the prices of final products. Moreover, the relationship of raw material prices with retail prices, for example between world market price for coffee price and retail coffee prices is, in general, asymmetrical; that is, retail prices for individual products often go up when international prices increase, but do not come down in the opposite case. A related development is the drastic increase in the difference between the international price of the unprocessed agricultural product and that of the final good. A recent study[20] found that in developed countries, the spread (or mark-up) between international prices (defined as cost, insurance and freight (cif), that is, import prices in developed countries) and domestic wholesale prices, as well as that between domestic wholesale and retail prices, widened since the early 1970s, and at an accelerated rate in the 1980s. Import taxes as well as domestic logistics costs have fallen, so the only factors that can explain this tendency are the relative weight and growth of other marketing and distribution costs in the value-adding process beyond the import price, or the market power of intermediary companies. (Comparisons of this kind for minerals and metals would be much more difficult, since the share of these materials in the final product is even smaller than agricultural products.) This tendency, and the asymmetry just mentioned, have worked against potential increases in consumption that could have been generated had retail prices declined with international prices.

D. Restructuring in the metals and minerals sector and price fluctuations

24. The restructuring process referred to above has resulted in a flat industry cost curve for most metals. Fixed costs are a high proportion of total costs, and exit barriers, in the form of high capital charges, high decommissioning costs due to environmental regulations and long-term contracts for inputs such as electric power, are important. As producers tend to go on producing as long as they can cover their relatively low variable costs, prices have to fall far before closures occur. In this industry with a homogeneous cost structure, this means that continuing production in spite of declining prices is a general phenomenon. Unwillingness to undertake production cuts while demand was still relatively strong although prices were falling contributed to the severity of the recent price falls.

25. Increased operational flexibility has also made it somewhat easier for mining and metals companies to respond quickly to increased demand. In most mines, production can be increased relatively quickly, particularly in large open pit mines which account for an increasing proportion of production. Metallurgical plants find it somewhat more difficult to raise production quickly, but as a legacy of the latest round of restructuring, most major metals companies have reserve high-cost capacity which has been "semi-retired" but which can be brought back into production in a matter of months in order to profit from a temporary price peak. For instance, over 10 per cent of the world's aluminium smelter capacity was closed more or less temporarily at the end of both 1997 and

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[20] Morisset, J., "Unfair trade? The increasing gap between world and domestic prices in commodity markets during the past 25 years", *The World Bank Economic Review*, Vol. 12, No. 3, 1998.

1998[21]. A large portion of this production capacity could be brought back into production relatively fast.

26. As a consequence of the reluctance to cut output when prices are low and the facility with which output is increased in response to price increases, the price troughs risk becoming longer and deeper, while the duration of the price peaks may become shorter. Moreover, investment in the mining and metals industry tends to be procyclical, that is, it increases when prices are high[22]. Since delays in projects are costly, the investment activity is usually continued even when prices fall. Consequently, the additional capacity usually comes into operation when prices have turned down, thus reinforcing the downward pressure on prices. In contrast, projects on which construction has not yet started tend to be postponed when prices fall.

IV. FINANCIAL CRISES AND COMMODITY MARKETS

A. Financial crises in major developing countries and impacts on the commodity sector

27. The impact of the Asian crisis, acting on both the demand and supply sides, has been a significant blow for exporters of commodities, aggravating the cyclical decline in prices which had begun in 1995[23]. Markets had been growing particularly fast in the region over the past two decades. The share of Asia (excluding China and West Asia) as importer of food products had risen from 7.1 per cent in 1980 to 10.8 per cent in 1995. The corresponding increase for agricultural raw materials was from 10.5 per cent to 16.5 per cent. The most striking rise was for ores and metals, where the share of world imports going to this region increased more than threefold, from 5.1 per cent to 16.1 per cent. Imports were severely curtailed as a result of the crisis as economic activity declined. The volume of imports into the most severely affected five countries (Indonesia, Malaysia, Philippines, Republic of Korea and Thailand) declined by more than 20 per cent in 1998. In value terms the contraction was one third. The corresponding declines volume and value terms in Japan were 5.5 and 17 per cent[24]. The relatively strong growth of demand in several developed countries, in particular the United States, however, made up for part of this shrinking demand, especially for metals.

28. For some such products, exports from the same five countries increased, partly as a result of declining local demand, but mostly in response to currency devaluations. This added to the downward pressure on prices but mitigated some of the negative effects of the crisis on the economies of these countries. Mainly as a result of problems with access to finance and importing necessary inputs, however, exports of industrial products stagnated. In 1998, for total exports (commodities and industrial products) among all regions, export volume growth was the slowest for Asia, increasing only marginally. The strong contraction of intra-Asian trade was only just offset by a sharp rise in extraregional flows. This sharp rise was accounted for mostly by the commodity sector. Consequently, although commodity exporters in general suffered from the impact of the Asian crisis on world markets, which aggravated the fall in prices already being experienced, the commodity sector provided a bright spot for the crisis-stricken countries of Asia.

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[21] U.S. Geological Survey, *Mineral Commodity Summaries*, Washington, D.C., 1999.

[22] Linnell, Richard, Untitled paper prepared for the UNCTAD Expert Meeting on the Impact of Changing Supply and Demand Market Structures on Commodity Prices and Exports of Major Interest to Developing Countries, Geneva, 7-9 July 1999, and Spilimbergo, A., *Copper and the Chilean Economy, 1960-98*, IMF Working Paper No. 99/57, 1999.

[23] For an early assessment which generally still holds true, see UNCTAD, *Trade and Development Report*, 1998, pp. 39-45. This section provides additional information on the performance of the commodity sector in crisis countries.

[24] WTO press release, PRESS/128, 16 April 1999, pp. 8-9.

29. Mainly as a result of devaluations in these countries, the export-oriented commodity sector, which is much less dependent on imported inputs than manufactures, emerged from the crisis relatively unscathed, and in many instances benefited from it in terms of profits in domestic currencies. In Indonesia, for example, "for 1998, the plantation sector -- grouping coffee, cocoa, rubber, oil palm, tea and other plantation crops -- managed to register growth of 6.5 per cent compared to the previous year. The overall economy, by comparison, contracted by almost 14 per cent", and a quadrupling of profits in 1998 was even reported for one of the largest plantations[25]. In Thailand, although the economy shrank by 8 per cent in 1998, things would have been much worse had it not been for agriculture. "During the first nine months of 1998, the value of Thailand's rice exports rose by 58 per cent [and] its exports of prawns rose by 35 per cent" in terms of domestic currency. Thus, agricultural exports offset some of the malaise in overall economic performance[26].

30. The negative impact of macroeconomic crises on commodity markets was demonstrated once again in January 1999 as Brazil encountered its financial crisis and devalued its currency. Commodity markets were affected immediately and significantly. For example, the prospect of rising exports from Brazil, coupled with bumper crops in several important producing countries and foreign exchange shortages in the Russian Federation, usually a big buyer, drove sugar prices below 5 cents per pound, the lowest level in more than 12 years. In the case of soya bean, Argentina cut its export price to stay competitive with Brazil, after the latter's devaluation[27]. The coffee market was affected as Brazilian shipments reached an estimated 5 to 6 million bags above its quota of 15 million bags under the Association of Coffee Producing Countries export programme[28]. Just as in the Asian countries, however, the relative strength of the agricultural sector in crisis situations is also illustrated in Brazil. In February 1999, while the Brazilian "economy as a whole moved deeper into recession, sales of farm machinery were 29 per cent higher than in the same month" of 1998[29].

B. Comparison with the 1980s

31. The impacts of financial crises in major developing countries on world commodity markets may follow different paths depending on the nature of the affected countries and on macroeconomic conditions in the rest of the world. In the 1980s, for example, commodity prices fell just as Latin American countries were in dire need of foreign exchange to pay their foreign debts. Moreover, these payments were particularly high and growing, as interest rates rose. Thus, the pressure to increase exports was very strong. The high interest rates also slowed economic activities and reduced the demand for imports in the main markets in industrialized countries, putting further downward pressure on prices. In the current situation, interest rates are relatively low and demand has been relatively strong in most of the industrialized world, particularly the United States. The urgency of increasing exports, and the downward pressure on prices, is therefore somewhat mitigated. Another difference between the economic conditions of the earlier crisis and the present one is that FDI and the presence in the crisis countries of transnational corporations (TNCs) with better access to finance are larger now than before. This helps in alleviating some of the financial troubles felt in the affected countries.

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[25] *Asian Wall Street Journal*, "Indonesian commodities traders fear election boost for Rupiah", 28 May 1999, p. 23.

[26] *The Economist*, "Winds of Fortune on South-East Asia's Farms", 3 April 1999.

[27] "Brazil crisis roiling Asian markets", SUNS, 27 February 1999, p. 5.

[28] F.O. Licht's International Coffee Report, Vol. 13, No. 24, 4 June 1999, p. 343. A new agreement on export quotas was reported on 8 July 1999.

[29] *The Economist*, "Growth in the prairies", 10 April 1999, p. 54.

32. As opposed to the crisis of the 1980s when the immediate reaction by the crisis countries was an attempt to increase exports, in the Asian crisis, the initial impact on commodity markets was a reduction in demand in these countries. The impact of increased exports emerged with a slight time lag and did not encompass many products. Brazil, however, is a significantly more important exporter than importer of non-oil commodities. Its commodity exports amount to more than half of the total for the five most seriously affected Asian countries, but it imports only about 10 per cent of their total. It is the world's largest exporter of coffee, sugar, soya and orange juice, and an important exporter of beef, pork and chicken. Compared to the Asian countries, Brazil may also be a more aggressive exporter, as its problems have emerged after several years of trade deficits, unlike the former, which had strong trade balances. Thus, if Brazil's economic difficulties continue, the major impact of its crisis on commodity markets is likely to come through exports, as in the 1980s.

C. Devaluations, commodity trade and transmission of crises

33. As the commodity sector is much less dependent on imported inputs than the manufacturing sector, devaluations carried out by affected countries have a stronger effect on the exports of this sector. The relative cost advantage obtained by commodity exporters in devaluing countries is larger than that obtained by exporters of most manufactured products. Export prices for commodities can be reduced while maintaining profitability in domestic currency more easily than for manufactured products. The commodity sector has, therefore, acted as one of the primary vectors in crises originating in developing countries. Commodity prices, in particular for products traded in bulk, which make up most of commodity trade, are set in competitive markets and respond quickly to changes in economic conditions, even to rumours, while prices of most other products, particularly industrial products, are adjusted gradually. Moreover, as developing countries produce similar products and are dependent on them, they feel a stronger impact than the developed countries which are much less dependent on commodities.

34. The impact of devaluations on the commodity sector differs depending on whether exportable products are consumed to a significant extent in producing countries or are primarily directed to exports. In the first case, potential increases in domestic prices resulting from devaluations lead Governments, conscious of the needs of domestic consumers, to take measures such as export bans or export taxes in order to maintain domestic consumption. In such cases, the increase of supplies on the world markets is curtailed and there may be little or no impact on the world market. In fact, markets may react with increasing prices to such situations, as has been the case, for example, with palm oil in late 1997, when Indonesia banned palm oil exports[30]. When the product is produced primarily for exports (and the devaluing country is a significant exporter), recourse to such measures is not necessary, and the impact of devaluation immediately manifests itself as reduced international prices as the devaluing country tries to increase its exports.

D. Links between financial and commodity markets

35. In recent turbulent periods in the world economy, ever larger amounts of speculative funds and increasingly closer links between financial and commodity markets have aggravated the instability of the latter.

36. The relationship between financial and commodity markets works in several ways. One of the

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[30] Rangkuti, H.T., Paper prepared for the UNCTAD Expert Meeting on The Impact of Changing Supply and Demand Market Structures on Commodity Prices and Exports of Major Interest to Developing Countries, Geneva, 7-9 July 1999.

more obvious is that the liquidity of commodity futures markets, combined with their large fluctuations, may at times make them attractive to investors who are drawn by the potentially large gains and not deterred by the correspondingly large risks of losses. Thus, the growth in speculative funds over the past decade or so has contributed to increasing instability of commodity prices, although it does not change market fundamentals. "In periods of heightened uncertainty about the future movements of commodity prices, or exchange rates, or inflation rates, very large amounts of funds can be switched, either for hedging or for speculation, from other asset markets into commodities, or vice versa"[31]. "The incursion of commodity funds as significant investors means that commodity prices increasingly anticipate, rather than reflect, changes in industrial production"[32] or in other aspects of the real economy that concern products with established futures markets.

37. Secondly, since profits of commodity companies tend to fluctuate in tandem with, but more than, commodity prices, investment in the shares of these companies, mainly mining and metals companies, will also attract investors who are looking for large potential gains. While investors would in theory be expected to base their valuations of shares on long-term profit expectations, their behaviour seems to indicate that increasing weight is accorded to short-term profit prospects. Shares in gold mining companies have traditionally been the preferred objective of such investment, but the shares of other mining companies have also been intensively traded at times of price fluctuations. It has been noted that the share prices of mining companies tend to anticipate price movements in metals. This has certainly been the case in the latest crisis, when metals price increases in the spring of 1999 were preceded by large increases in the shares of mining companies. For example, initially reasonable rises in copper and mining shares, anticipating certain closures (coupled by speculative rises in prices), had gone so far in late May 1999 that it was feared they would "render less likely the very closures on which they were predicated"[33]. Thus, an important effect of such rises in share prices is that, although temporary and speculative, they affect decisions concerning the real economy by reinforcing the cyclical behaviour of the companies concerned.

V. MARKET STRUCTURES AND THE COMMODITY ECONOMY

38. The world commodity chains, particularly for agricultural products, are undergoing significant changes in the manner in which they are organized, from production in exporting countries to the retail level in consuming markets.

39. This evolution can be reviewed at three levels, namely, the international markets, developing commodity-exporting countries, and importing countries. The common denominator of all three is a closer integration of international trade and production through the penetration of large transnationals and distribution companies, such as supermarket chains, into the agricultural supply structures of developing (and developed) countries. A few decades ago, the dominance of large companies in the world commodity economy was principally through their actions on international markets. Now, increasingly, it is also through their direct influence on what is produced, and how. While unprecedented opportunities may be opening up for some producers and exporters, benefiting from this trend and avoiding its negative impacts requires much greater business skills than before on the part of developing country Governments and entrepreneurs.

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[31] Maizels, A. "The Continuing Commodity Crisis of Developing Countries", *World Development*, Vol. 22, No. 11, 1994, p. 1692.

[32] *Financial Times*, "Analysts see recovery in base metals", 20 May 1999.

[33] Ibid.

A. The international level

40. At the international level, there is a continuing concentration of trade and vertical integration of large firms. Recent estimates indicate, for example, that in 1996, five TNCs accounted for close to one half of world trade in green coffee, up from about 37 per cent in 1980. In coffee roasting and manufacturing, concentration is somewhat higher, and it is four groups that account for one half of the market. For cocoa, in 1980 there were over 30 trading houses in London, and now this number has been reduced to around 10. After a series of mergers, for example, the six largest chocolate manufacturers account for 50 per cent of world sales. For vegetable oils, again a series of mergers and acquisitions in the 1990s led to the dominance of a small number of vertically integrated TNCs in the production, distribution and international trade of both oilseeds and oils. In grains as well, consolidation is under way, with the few big companies transforming themselves into integrated businesses encompassing trading, storage, processing and milling.

41. Another important change is the disappearance of traders. While earlier, traders acted as a bridge between buyers and sellers who were largely ignorant of each other and of prices, communications technology, including the Internet, has now closed this gap. Buyers and sellers can find each other much more easily and communicate instantaneously, increasing competition and cutting profit margins for traders. Traders' advantage was largely based on having information that others did not have, but that advantage is being eroded. "Price information is not only widely available but can be obtained instantly, severely reducing the opportunities for arbitrage and narrowing profit margins"[34].

42. Intensified competition favours those with access to cheaper finance and good logistics. Being big provides advantages on both accounts. With deregulation and the disappearance of marketing boards, large companies with warehousing and shipping facilities in the producing countries are able to exploit their financial and logistical advantages, even buying the produce directly from the farmer[35]. Similar developments are taking place for almost all food products. An example from the fishing sector illustrates the situation for many commodities. "The *trader* way of mind in the 60s and the 70s where traders' main objective was to buy cheap and sell expensive wherever they could is giving way to an *industrial* way of mind where buyers wish first of all to secure regular sources of supply of raw material. They are more interested in establishing long term relationships with suppliers"[36, 37].

43. The current setting is characterized by the need for greater capital resources sophisticated technology, including information technology, and human skills for competing in the more open but more sophisticated markets. Developed country firms are patently at an advantage in all these respects.

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[34] Pugsley, J., "Looking beyond commodities", *Trade & Forfeiting*, December 1998/January 1999.

[35] Improved logistics also allows large firms to buy increasingly on a "hand-to mouth" basis, thus reducing the cost of holding stocks and shifting the burden of such finance backwards. Chocolate companies, for example, which used to hold inventories covering a year or more, have reduced this coverage to as little as four months (Mosser, M., "Hot commodities", *Futures*, May 1999, v. 28 (5).

[36] Wiefels, R. C. "The Case of the Latin American Fishery Sector", paper prepared for the UNCTAD Expert Meeting on The Impact of Changing Supply and Demand Market Structures on Commodity Prices and Exports of Major Interest to Developing Countries, Geneva, 7-9 July 1999.

[37] The security of supplies of raw material is an important issue for all processors. For instance, several sugar plants in Viet Nam, some of them opened by foreign investment, were in trouble as cane supplies fell below the required levels ("Vietnam's sugar plans turn sour. Most foreign companies in the country are struggling to find cane", *Financial Times*, 4 May 1999, p. 28).

B. Commodity-exporting developing countries

1. Liberalization, production and trade

44. At the level of commodity-exporting developing countries, liberalization, in particular the dismantling of marketing boards, has had three main consequences. First, a large number of atomized traders emerged but many were later eliminated under intense competition, mainly due to lack of business skills, but also owing to difficulties with access to finance. Those that survive often have links with foreign firms. This helps them not only in market entry but also with securing finance. Second, the commodity sector was opened up to direct participation by foreign firms that deal with exporters, generally much smaller than themselves, and at times directly with producers. Third, the elimination of import barriers, as discussed above (*See Box 1: Subsidized exports and West African tomatoes)*, affected local production patterns. In the same vein, imported processed products, mostly with well-known brand names and often sold through foreign-owned supermarkets, have made important gains in developing countries at the expense of locally produced items.

45. The withdrawal of Governments from the commodity sector in developing countries has facilitated the changes mentioned above at the international level. Foreign firms, in particular large ones, were able to reach deep into the production, trading and processing levels in these countries. This had far-reaching consequences for the domestic private sector, which often has to operate in an unfavourable institutional, legal and regulatory framework. In the first years of liberalization, some of the marketing activities of the former government marketing boards were taken over by a range of local traders. Relatively quickly, however, these traders were replaced by international trading companies or their agents. Among the reasons for this are the relatively high cost of credit for the local traders, as well as their difficulties regarding logistics and risk management activities. Several examples can be cited from Africa. The "liberalization of the cocoa sector in West Africa has resulted in sharply increased concentration in the export sector, with a tendency for European grinders and trading houses to integrate backward into the origins, either directly or through agent relationships. ( ) Two factors drive this concentration. First, the trend towards bulk transportation of cocoa necessitates collection into large shipments. ( ) The second factor is access to finance"[58]. In Burundi as well, the number of exporters has sharply declined. Large local exporters who control most of the sales depend heavily on foreign finance coming indirectly from trading houses[59]. Again regarding financial constraints faced by indigenous commodity exporters, in the United Republic of Tanzania, the amount committed by two large Indian trading firms for financing cashew trade was greater than the aggregate borrowing, from local sources, of four cooperative unions and two parastatals[60]. Overall, this increased presence by foreign firms, facilitated by economic liberalization, has probably led to a fall in the percentage of the international market value of commodities retained in the country.

46. On the positive side, the most visible benefit from liberalization, in several countries, has been an increase of farmgate prices as a proportion of export price. Although an analysis covering the early

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[58] Christopher L. Gilbert, *Cocoa market liberalization, its effects on quality, futures trading and prices*. The Cocoa Association of London, September 1997.

[59] Ndayikengurukiye, C., "Incidences de l'evolution des structures des marches de l'offre et de la demande du cafe au Burundi", paper prepared for the UNCTAD Expert Meeting on the Impact of Changing Supply and Demand Market Structures on Commodity Prices and Exports of Major Interest to Developing Countries, Geneva, 7-9 July 1999.

[60] Mwase, N. "Economic liberalization and privatization of agricultural marketing and input supply in Tanzania: A case study of cashewnuts", African Economic Research Consortium, *AERC Research Paper* 86, Nairobi, November 1998.

years of liberalization indicated that "domestic terms of trade for agriculture moved much more favourably in the 'heavy intervention' countries than in 'light intervention' ones,"[41] there is ample anecdotal evidence for recent years illustrating an increase in farmers' earnings as a proportion of export prices.

Box 2

Liberalization in Uganda's coffee sector

In the coffee sector in Uganda, where a government exporting company competes freely with the private sector, the earnings of farmers as a percentage of export price rose from "20 per cent just before liberalization to a high of 78 per cent". One consequence has been a boost in production.

Liberalization has had further side effects on the commodity sector. In Uganda, as the agents of exporters collecting coffee in the countryside (who help in increasing the farmgate price through competition) are paid commission on the volume collected, less attention was paid to quality. It was only when the industry became more concentrated that quality began to improve. The liberty of farmers to sell to whomever they want has increased their earnings but made access to chemical inputs more difficult. Prior to liberalization, cooperative unions would provide farm inputs to the farmer to be paid at marketing. With liberalization, no single exporter advances chemicals to farmers because at marketing the coffee can be sold to anyone. Thus, more sophisticated financing schemes are called for to provide easier access for farmers to finance.

Based on Ngategize, P. K., "A case for Uganda coffee", paper prepared for the UNCTAD Expert Meeting on the Impact of Changing Supply and Demand Market Structures on Commodity Prices and Exports of Major Interest to Developing Countries, Geneva, 7-9 July 1999.

2. Economies of scale, market exigencies and increasing investment costs

47 There are two principal reasons why commodity producers and processors need increasingly larger amounts of finance to compete on world markets. First, modern technological advances provide considerable economies of scale in processing, but call for large investments in processing plants. For example, large crushing facilities are considered a necessity for competitiveness in the vegetable oils sector. Second, more stringent market exigencies call for ever larger investments to meet buyers' quality requirements and specifications[42]. For example, in the case of fish in Latin America, the cost of upgrading the installations and processing facilities to meet Hazard Analysis Critical Control Point (HACCP) requirements is estimated at $300,000 per firm, and this requires a total of $300 million for Latin America as a whole[43]. Modern flower plantations in Ecuador are reported to require "an average initial investment of $200,000 per hectare", in addition to other requirements for success, such as highly complex technology and marketing skills, and compliance with stringent market demands[44]. These conditions are, naturally, to the disadvantage of small producers who need to either organize themselves into larger cooperative entities or seek links with foreign firms that would extend the necessary finance and know-how.

48 Although developed country firms are usually the sources for such external finance, foreign investment in the commodity chain by large companies from developing countries is also observed. For example, a major Indian company, Tata Tea, is considering acquisitions of tea plantations in

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[41] UNCTAD, *Trade and Development Report*, 1998, p. 162.

[42] For stringent market requirements see UNCTAD, "Opportunities for vertical diversification in the food processing sector in developing countries" (TD/B/COM.1/EM.2/2), 23 June 1997.

[43] Investments were realized by the companies without benefiting from any official subsidy (as did, for instance, EU enterprises) (Wiefels, *op. cit.*, p.2).

[44] Thrupp, L. A., *Bittersweet Harvests for Global Supermarkets: Challenges in Latin America's Agricultural Export Boom*, World Resources Institute, August 1995, p. 39.

Kenya. Along with the advantage of securing year-round production possibilities for the company, this is hoped to help create an international brand image for Tata Tea[45]. Sometimes, developing country firms with access to sufficient finance enter the commodity chain at the lucrative downstream stages. A recent example is Bidvest of South Africa acquiring the food service subsidiary of United Kingdom food wholesaler, Booker[46]. Successful commodity firms which diversify into other commodity sectors in their own countries have also been instrumental in developing modern commodity production and marketing operations. In Brazil, for instance, the "poultry sector giants Sadia and Perdigão are investing in seafood distribution and aquaculture"[47].

49. Large investments by Governments are also necessary to meet market exigencies. Although such investments often take the form of institutional and technical support, direct investment may be necessary as well. In Argentina, for example, in order to be designated as "zero risk" for foot-and-mouth disease and to gain access to developed country markets, "a seven-year US$600 million campaign entailing the vaccination of the entire cattle herd was undertaken, partly financed by the Inter-American Development Bank". Only after having been declared free of the disease did the public and private sectors join forces to promote beef sales abroad[48].

C. Retail markets of importing countries

50. A large part of world commodity trade is in bulk products that go through considerable transformation before reaching consumers. For these commodities, changes in the retail markets of importing countries have little influence. For many dynamic food products, however, there seems to be general agreement that the single most influential factor in changing conditions of supply and demand has been the growth of the modern retailing sector, in particular, supermarkets[49]. For exporters of such "non-traditional" commodities as fresh fruit and vegetables, large retailers have provided important market access channels. Links with supermarkets provide producers with access to a growing market as well as incentives to improve quality and efficiency. Nevertheless, for many producers and exporters this is obtained at the expense of dependence on a single supermarket or importer in a given country for marketing, product innovation and technical assistance.

51. An important consequence of the growth and internationalization of supermarkets has been increasing global brand name recognition. As product attributes become more and more psychological, the importance of expenditures on advertising and related activities is increasing. This puts developing country traders at a disadvantage and contributes to the concentration in the commodity economy. Difficulties are almost insurmountable for developing country exporters to differentiate their products and establish new brand names to compete with the existing globally accepted ones. Success stories from developing countries in this respect are very rare. Opportunities may be easier in areas where the attributes remain more "generic", such as organic products, which currently enjoy rapidly growing demand.

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[45] *Businessline*, "Tata Tea scouts for estates in Africa", 11 May 1999.

[46] PricewaterhouseCoopers, *International Briefings*, June 1999.

[47] Weifels, *op. cit.*

[48] World Trade Organization, *Trade Policy Review Argentina*, (WT/TPR/S/47), pp. 109-110.

[49] OECD, "Vertical coordination in the Fruit and Vegetable Sector: Implications for Existing Market Institutions and Policy Instruments", Working Paper, No. 32, Paris 1997, p. 9.

Box 3

The impact of United Kingdom retailers on the fresh fruit and vegetables industry in Africa

Fresh fruit and vegetables (FFV) production is a growing industry in sub-Saharan Africa, especially Kenya and Zimbabwe. Between 1992 and 1996, FFV exports for Kenya and Zimbabwe grew by 50 per cent and 150 per cent respectively. More than 90 per cent of horticultural exports originating from Africa are sold through supermarkets, which control over 80 per cent of the United Kingdom market.

Diversification into FFV offers performance and risk-reduction benefits for producers and exporters with guaranteed market outlets. Given the large number of producers (e.g. over 2 million in Kenya) and linkages with post-harvest operations, the multiplier effects are substantial. Consumers relish competitive prices and a dedicated year-round supply of quality FFV and exotic fruits assured by stringent safety and due diligence requirements and adherence to quality, reliability and efficiency criteria imposed by large retailers and supermarkets. The greatest share of returns (over 45 per cent of price) is captured at the end of the chain by supermarkets.

The large retailers and supermarkets not only design and market brand names but also structure the supply chain, initiate proactive high-value research and development into innovation and value-adding activities, and provide financial services. These firms influence profit margins and help to determine who will participate in the chain. Although they monitor and evaluate the FFV chain, they do not have any direct supervision or control. The costs and risks of these activities are borne by the large producers, exporters and category managers in producing countries.

Links with United Kingdom supermarkets have provided African producers with access to a growing market as well as incentives to improve quality and efficiency. However, this may have been obtained at the expense of relying on United Kingdom supermarkets and importers for marketing, product innovation and technical assistance. Given that marketing skills and innovation are the essential ingredients of success, this reliance would leave the stakeholders in the producing countries highly vulnerable to substitution by competitors from other countries. Specialization in production targeted to particular buyers carries with it the following risks. The producer may learn to carry out only a narrow range of production and quality control activities; by having the non-production-related value-added activities in distant places, the scope for acquiring new competencies and sources of income is limited; concentration of innovation activities in the hands of retailers and importers leaves the producer end of the chain vulnerable to shifts in tastes of overseas consumers and in the marketing strategies of large buyers.

Another problem is concentration of exporters and growers, as the importers find dealing with large suppliers more convenient than with small ones. For example, in Kenya, over 70 per cent of FFV trade is dominated by just a few exporters. Noticeable also is the marked increase in the development of large owner-producer farms, some with direct supply links to supermarkets in the United Kingdom. To prevent further marginalization, good organizational arrangements are required for small-scale producers in the producing countries.

Based on Harris-Pascal, C., Humphrey, J., and Dolan, C., "Value chains and upgrading: the impact of UK retailers on the fresh fruit and vegetables industry in Africa", Institue for Development Studies, Brighton, United Kingdom, 1998.

VI. POLICY PROPOSALS

52. The preceding chapters give rise to the following policy proposals:

(a) The key market access problems faced by commodity exporters should be urgently addressed, with the elimination of tariff peaks and tariff escalation, placing agricultural commodities on the same footing as other products in the international trading system, and ending trade-distorting agricultural support measures by developed countries. Alternatively, developing countries should have the right, and be provided with the means, to offer equivalent levels of support to their own farmers and processing industries. In order to "level the playing field", international-level competition

policy issues should be dealt with, possibly by including them in World Trade Organization (WTO) negotiations. Financial and technical assistance for addressing supply-side constraints, particularly in the LDCs and covering marketing and quality improvements and support measures for developing countries dependent on the imports of essential commodities, should be included in negotiations on the liberalization of agriculture.

(b) The competitiveness of developing countries in international commodity markets needs to be enhanced. In this context, cooperative arrangements among enterprises in developing countries for improving supply reliability and quality could be useful. The establishment of a new generation of business-oriented marketing boards could be explored in order to fill some of the void created when the traditional marketing boards were abolished. Capacities of developing country enterprises to access and use information, particularly in electronic form, should be improved, and training to this end should be supported. Support should also be given to national efforts to develop a policy and institutional framework conducive to the use of modern financial instruments in commodity trade by farmers, traders, processors, financial institutions and investors. The establishment of natural-resource-based clusters consisting of mutually supportive commodity sector enterprises would help in production and export success as well as diversification. The capacity of local Governments to support commodity-based development programmes should be upgraded. Developing country enterprises should be assisted so that they can benefit from the trend towards product differentiation and establish their own brand marks. FDI in the commodities sector can contribute to improved international competitiveness of developing countries, as shown by developments in the minerals and metals industry. In order to maximize the contribution of foreign investment to development, it needs to be integrated into the domestic economic, social and political framework.

(c) The activities of producer/consumer commodity bodies are crucial for improving market transparency and exchange of information and experiences. It would be desirable to strengthen their effectiveness by both widening their scope of activities and ensuring the participation of all stakeholders. It would be also desirable to establish the means for international cooperation on commodities not covered by existing producer/consumer bodies. The activities of the Second Account of the Common Fund for Commodities should be expanded and increased funding made available to it to finance research and development and extension services in developing countries and adaptive research on production and processing aimed particularly at smallholders and small and medium-sized enterprises in developing countries.

53. In order to implement the above proposals, the following actions could be envisaged.

(a) The development of commodity-specific programmes of action on individual commodities to be undertaken by UNCTAD in collaboration with competent international organizations, and involving Governments, producers' and consumers' groups, the enterprise sector, independent experts and NGOs. This might also include the identification of new orientations for international commodity bodies, to increase their effectiveness.

(b) Development of options for filling the void created by the withdrawal of marketing boards in developing countries from many functions in the commodity sector, in particular regarding research and development, supply of basic technology and extension services, supply of inputs to farmers, quality control, warehousing, transport, financing, price risk management, and market intelligence. A principal objective will be to enhance the capacity of the indigenous private sector to take over the above functions.